

## UNITED STATES PATENT APPLICATION

for

## ARCHIVE OF A WEBSITE

Applicant:

Clay Harvey Fisher

prepared by:

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP  
12400 Wilshire Boulevard  
Los Angeles, CA 90026-1026  
(408) 720-8300

EXPRESS MAIL CERTIFICATE OF MAILING

"Express Mail" mailing label number EL627469071 US  
Date of Deposit December 12, 2000  
I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Cindy Murphy  
(Typed or printed name of person mailing paper or fee)

Cindy Murphy  
(Signature of person mailing paper or fee)

## ARCHIVE OF A WEBSITE

## RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Application No.

5 60/181,836, filed February 11, 2000.

## FIELD OF THE INVENTION

This invention relates generally to computers, and more particularly to a system for archiving visual files located at a website along with website characteristics.

10

## COPYRIGHT NOTICE/PERMISSION

A portion of the disclosure of this patent document may contain material which is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent document or the patent disclosure as it appears in the Patent and Trademark Office patent file or records, but otherwise reserves all copyright rights whatsoever. The following notice applies to the software and data as described below and in the drawings hereto: Copyright © 1999, Sony Electronics, Inc., All Rights Reserved.

15

20

## BACKGROUND OF THE INVENTION

Presentation software exists that allows a computer to display one or more visual files such as photographs. Such presentation software may reside on a client's

09:35:12.00



	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2
--	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	---

[illegible]

**Figure 2** is a diagram illustrating an overview of software suitable for

**Figure 3** is an illustration of the archival system operating to linked websites;

**Figure 4a** is a flow diagram of a client interacting with a server; and

**Figure 4b** is a flow diagram of processing elements of a typical computer.

## DETAILED DESCRIPTION OF THE INVENTION

09335542100  
In the following detailed description of embodiments of the invention, reference is made to the accompanying illustrations in which like references indicate similar elements, and in which is shown by way of illustration specific embodiments  
5 in which the invention may be practiced. These embodiments are described in sufficient detail to enable those skilled in the art to practice the invention, and it is to be understood that other embodiments may be utilized and that logical, mechanical, electrical and other changes may be made without departing from the scope of the present invention. The following detailed description is, therefore, not to be taken in  
10 a limiting sense, and the scope of the present invention is defined only by the appended claims.

As illustrated in a flow diagram in **Figure 1**, the present invention provides an archival system 100 using archive software 101 to select an entire website 104 or select a portion of the website 104 for copy to a storage medium 120, 121. The  
15 storage medium 120, 121 may reside at a viewer's computer 106 or may reside on a server 109. The viewer may be a client who will be charged a fee for some or all of the information copied. The viewer may also be the general public and some or all of the information may be available at no cost. In either case, some of the website 104 information may be protected requiring a password. Once the data to be archived is  
20 selected 114, 116, 118, copying of the data 114, 116, 118 may be performed to the storage medium 120 on the viewer's computer 106 and/or to the storage medium 121 on the server 109.

The flow diagram illustrates the viewer's computer 106 arriving at an original or first website 104. Archive software 101, accessible from the website 104 allows for

selection of data for archive. A selection is made from the website data 108, 110, 112 that may include some or all of any visual files 108, some or all of the website characteristics 110, and certain accounting information (business data) 112. In addition, as described in more detail below, selection of data from websites linked to the original website 104 is possible.

Once selected, the visual files 114, website characteristics 116, and accounting information 118 are copied onto the machine-readable medium 120 or 121. When archived onto the viewer's machine-readable medium 120, the archived copy 102 may be viewed offline with the same appearance and characteristics as the original website 104 limited only by the data 114, 116, 118 that was selected for archive. Alternatively, if stored on the server machine-readable medium 121, the archived copy 102 may be accessed on-line.

In an embodiment, a web page that behaves as a photo album to store a number of photo images is archived. Referring to **Figure 2**, a flow diagram shows archive software 202 residing at a Server A 204 with Server A 204 supporting a first website 206. The archive software 202 provides for the selection of viewable files, web site characteristics, and business data from the original website 204 as well as from websites 216, 218 at server B 220 and at server C 222 linked to website 218. Alternatively, the third website 218 may be linked to the second website 216. The discussion of two linked websites 216 and 218 are illustrative only and any number of links is possible. The photo album (website data) 230, once selected, can be copied to the storage medium 224 for viewing or the photo album 230 may also be copied to server A 204 for viewing on-line or across a local network (not shown). The photo album archive copy 230 can respond similar to the original or first website 206 and

display photographs at various copied links 206, 216, 218 or the photo album archive copy 230 may have all photos from all links 206, 216, 218 placed on a single photo album archive website.

In an embodiment, the archival system 300 begins at the original website 302.

5 Referring to **Figure 3**, in one embodiment, the archive software 304 at a website 302, provides a series of options. The first option (Option A) 306 may be to view a list 307 of all websites, the original website and all websites linked to the original website. The website listing 307 may include all of the pages stacked behind each homepage of each website. At this point, portions or all of the websites listed 307 may be selected  
10 316. The selection 316 may be made by selecting a website where the selection will automatically select all stacked pages. The selection 316 may also be made by individually selecting web pages listed under each website. In this way, the selection of web pages to any depth of links can be accomplished. Option A 306 may be ignored and the default could be that all websites, original and linked pages, are  
15 selected 316. Other variations are possible such as the default setting would select the entire original website but only the homepages of the linked websites.

A second option (Option B) 308 may provide a list 311 of all website characteristics such as; boarders, page templates, editing tools, banners, and other site features. For a default condition, all website characteristics at all web pages selected  
20 with Option A 306 could be selected 318 for archive. However, the archive software can allow the selection 318 of website characteristics by function to be specified. Selection 318 by function could archive only the website characteristics performing that function. Again, this selection 318 would be made only on the web pages selected with Option A. In this manner, the selected 318 website characteristic function(s)



09735575 "124200

existing at all (selected) websites, can be archived. As described, Option B 308 allows selection 318 of website characteristics to be accomplished in several ways. The default could automatically include all website characteristics of each web page at each website (selected in Option A 306) in the selection 318. Another selection

5 method could allow selection of website characteristics 318 individually such as: page templates, editing tools, and site features from each website or each web page at each website. Again, website characteristics considered for selection 318 in this second option will only apply to the websites and pages selected at the first option.

The archival system may then provide a third option (Option C) 310, the

10 selection of business data. A list may be provided 312 of business data functions. Business data to be selected 320 may be chosen by the business data function. For instance, if order history and account status functions are chosen then only order history and account status information is selected from all previously selected websites (Option A 306). This functional approach can allow for the selection 320 of

15 specific business data from any page at any website that was made available with the Option A 306. Option C 310 may also allow for a more individualized pre-determination of what types of business data are to be selected 320. For example, a selection could be made of all business data 320 at the original website and only business data having a chosen function is selected 320 at the linked websites (again

20 for websites that were made available with Option A 306). In another example, data could be selected 312 for archive in a variety of ways in which the selection criteria varies with the website. Option C 310 could allow for visiting each website and individually selecting 320 each business option available or Option C 310 could allow

for a single click to select 320 all available business options from all selected websites.

Some business data, especially data visible at a website, could be copied without server restrictions. This might include data such as pricing and availability of an item. However, there may be some business data that is not visible at a website. Non-visible (hidden) data might include such data as specific viewer account data and credit information. For this hidden data, the server at each website could control what hidden data is available to what viewers and what hidden data is available through a security system such as with password protection software. When business data is selected 320, either by function, by individual selection at each website, or by requesting all business data, the archival system may prompt the viewer for a password for each website where information selected is protected.

Alternatively, Option C 310 could provide a list 312 of available business data for all viewers and a list of available business data that is protected. Selection can still be made 320 by function, by choosing each piece of business data individually, or by choosing "all" business data.

A fourth option (Option D) 312 could provide a list of all visual files 313 and the selection of certain visual files 322 for archive from the selected website(s). The list 313 could provide information as to file types. Selection of visual files 322 may be done individually from the list 313 but could also be accomplished by designating a file type. When a file type is designated such as a Bmp or Gif file, all files of that type are automatically selected for the websites selected (Option A 306). As with Option C 310, selection 322 of certain visual files may require a password 330 and the password may be associated with a billing mechanism.

Once the selection of the data (information) to be archived is accomplished, a storage medium can be designated 340. The storage medium may exist on the viewer's computer or on a server. After selection of the storage medium 340, the archive copying process 350 may be started by a mouse click on a screen location.

5 Alternatively, the data may be pre-selected and archived automatically and periodically from a set schedule, the scheduler may also be part of the archive software. If copied from a set schedule, the archived data may be stored at the server for later transfer.

10 The archived data may be stored on any machine-readable media such as CD ROM, DVD, hard disk drive, floppy disk, tape system, etc. The result of the archiving process is that the archived data can be viewed in a manner that re-displays as much of the original website(s) as was selected for copy. The display of the archived copy could include information such as; visual files, website editing tools, website characteristics, banners, business information, etc.

15 In an embodiment, a physical dial may be attached to the viewer's computer. Software can connect the dial with the website archive software interactively. The default setting for the dial could be the original (first) website homepage visited by the viewer and turning the dial could provide a changing display of the various local pages behind the homepage. Pushing the button in may select a displayed page and a  
20 second push could de-select the displayed page. Once selected, the page could be on a list of information to be archived. Pulling the button out could begin the archive process. The dial has several advantages over the use of conventional computer input devices such as a mouse or keyboard. The first is that the dial's use is intuitively obvious to a viewer because of the viewer's prior experience with dials that operate

other devices. Secondly, the dial, interfaced to a computer, may allow a series of pages to be easily displayed and selected, in a manner ideally suited to the viewer's present need.

00373575-12-1200

A system to archive a potentially large amount of website data has been disclosed. Within archive software the viewer first selects the websites and/or web pages to be considered for data selection. Next the viewer selects the data to be archived. Finally, the data is copied to a storage medium. In addition, the data may be copied at a pre-determined time in a schedule. The scheduled copy may reside at the server until the viewer returns to the website and requests the data. The selected data may include business data visible on the web pages and may include hidden business data. A viewer may select in an almost endless variety of ways; the visual files, business data, and website characteristics to archive.

The selection process may first determine the websites and the web pages considered for data (information) selection. Next the viewer may select website characteristics, business data, and visual files. The data may be selected individually or with a variety of convenient methods for the websites selected. Once the selection process is complete, a single click can archive the data. Some of the data, such as the visual files or the business data, may be purchased on-line using standard methods for accounting over the Internet. Some of the data may be protected or secure, requiring a password to archive. In an embodiment, one option of the archive software provides a list of all websites and all website pages linked to the original website. The viewer is then queried through one of several selection methods to select the number and depth of websites to be considered for archiving data. The second option can provide a list of all website characteristics used in the original website construction as well as for all

linked websites. The viewer then selects website characteristics to archive from a variety of selection methods available. Website characteristics can include business data that is visible to the viewer at a website location. The third option can provide the viewer with a list of business data. This list can include visible business data or it can

5 only include hidden business data. Selection is made for the business data desired from one of several selection methods. The fourth option can provide the viewer with a list of all visual files available for archive. The visual files can include all formats of photographic, art, video, and text files. Again, several methods of selection can be provided. Selection of visual files and/or business data may require a password.

10 Additionally, some data may be purchased using standard methods for business transactions over the Internet or a server. Included in the archive copy may be information taken from other storage mediums, as opposed to a website, such as a photograph residing on a disk. Finally, it is to be understood that the order of operation described beginning with Option A and proceeding sequentially through

15 Option D is described for convenience only. There is no implied or required order of operation for using the listed options. Further, this invention is not limited to four options, additional options that perform other functions are possible and can be added to those listed above. Such other options could include a variety of operations such as sending copies of the archive data across the Internet to selected e-mail addresses or

20 placing the business data in a spreadsheet.

One embodiment of a computer system suitable for use as a website archive system is a server computer 401 as illustrated in **Figures 4a and 4b**. The computer system 440 includes a processor 450, memory 455 and input/output capability 460 coupled to a system bus 465. The memory 455 is configured to store instructions

which, when executed by the processor 450, perform the methods described herein.

The memory 455 may also store data and content related to websites. Input/output 460 provides for the delivery and display of the content of the website or portions or representations thereof. Input/output 460 also encompasses various types of

5 computer-readable media, including any type of storage device that is accessible by the processor 450. One of skill in the art will immediately recognize that the term “computer-readable medium/media” further encompasses a carrier wave that encodes a data signal. It will also be appreciated that the server 401 is controlled by operating system software executing in memory 455. Input/output and related media 460 store  
10 the computer-executable instructions for the operating system and methods of the present invention as well as the data and content related to the websites.

The description of **Figures 4a & b** is intended to provide an overview of computer hardware and other operating components suitable for implementing the invention, but it is not intended to limit the applicable environments. It will be  
15 appreciated that the computer system 440 is one example of many possible computer systems that have different architectures. A typical computer system will usually include at least a processor, memory, and a bus coupling the memory to the processor. One of skill in the art will immediately appreciate that the invention can be practiced with other computer system configurations, including multiprocessor systems,  
20 minicomputers, mainframe computers, and the like. The invention can also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network.

Although specific embodiments have been illustrated and described herein, it will be appreciated by those of ordinary skill in the art that any arrangement, which is

calculated to achieve the same purpose, may be substituted for the specific  
embodiments shown. This application is intended to cover any adaptations or  
variations of the present invention.

For example, those of ordinary skill within the art will appreciate that where  
5 the invention as been described in terms of creating an archive copy of visual files  
that the visual files encompass all types of visual data, including pure text, illustrated  
text, the combination of audio and video, and audio only.

The terminology used in this application with respect to networks is meant to  
include all of environments in which a server computer communicates with client  
10 computers to send and receive data. Therefore, it is manifestly intended that this  
invention be limited only by the following claims and equivalents thereof.

09/23/95 12:20